





# Medical Officer's Report for 1904.

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To the Chairman and Members of the Beeston  
Urban District Council.

*Beeston,*

*February 1st, 1905.*

GENTLEMEN,

In presenting you with my 12th Annual Report on the health and vital statistics of Beeston for the year 1904, I regret to say that it has been a year of much anxiety to your Medical Officer, your Sanitary Inspector, your Sanitary Committee, and I think I may add to all the members of the District Council. It began badly with what threatened to be a serious outbreak of small-pox, and ended worse with a smart epidemic of diphtheria. Before referring further to these subjects I shall follow my usual custom of giving statistics of the meteorological conditions kindly supplied to me by G. Fellows, Esq., of Beeston Fields, a copy of which will be found at the end of this Report. From this it will be seen that the temperature for the year was exactly the average for the last 23 years. The highest recorded reading was on August 3rd, when the thermometer reached 84.2, and the lowest on November 24th, when 12 degrees of frost were registered. The total rainfall was 21.65 inches, 4.3 inches less than the average for the last 23 years, and 13.35 inches less than during the year 1903. Rain fell on 174 days out of the 365, which compares favourably with the previous year when no less than 203 days were more or less wet. There was only one fall of over one inch measured during 24 hours, viz., on August 17th. There was a slight earthquake shock felt throughout the district on July 4th.

The year 1904 on the whole was a fine one and the absence of spring frosts was very favourable to the agricultural and horticultural interests—the fruit crops in particular being very abundant. So far as I can judge the weather had no very marked influence on the general health of the community.

POPULATION.—I am again indebted to Mr. A. Kirkland for the information that on August 1st, 1904, 2,376 houses were inhabited in Beeston, while 60 houses were unoccupied. On the assumption that  $4\frac{1}{2}$  is the average number of inmates per house, this gives us a population of 10,692 inhabitants on that date— an increase of 315 over the corresponding date of 1903.

During the year 1904 there have been

300 births and 155 deaths as against					
278	„	„	112	„	in 1903
267	„	„	97	„	„ 1902
278	„	„	118	„	„ 1901
243	„	„	99	„	„ 1900
256	„	„	133	„	„ 1899
280	„	„	119	„	„ 1898
293	„	„	108	„	„ 1897
259	„	„	113	„	„ 1896
245	„	„	113	„	„ 1895
244	„	„	100	„	„ 1894

This gives a  
Birth-rate of

and a Death-rate of

28.0	14.4	per 1,000 per annum for 1904			
26.7	10.7	„	„	„	„ 1903
27.4	10.	„	„	„	„ 1902
31.	13.1	„	„	„	„ 1901
23.8	9.7	„	„	„	„ 1900
25.6	13.3	„	„	„	„ 1899
28.8	11.8	„	„	„	„ 1898
30.	11.07	„	„	„	„ 1897
28.7	12.05	„	„	„	„ 1896
29.6	13.6	„	„	„	„ 1895
30.5	12.5	„	„	„	„ 1894

Of the births 145 were males and 155 females, and of the deaths 66 were males and 89 females. Out of the 155 deaths four necessitated an inquest, and one was certified by the Coroner as being due to natural causes.

Of the total deaths—

34 occurred during the 1st quarter					
42	„	„	2nd	„	
43	„	„	3rd	„	
36	„	„	4th	„	

It is an odd fact that more deaths took place during the two summer quarters than during the winter ones. The deaths are classed under the following heads:—

	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894
Small-pox ... ..	0	0	0	0	0	0	0	0	0	0	0
Measles ... ..	0	0	0	16	0	1	4	0	8	0	9
Scarlet Fever ... ..	1	1	0	0	3	1	0	0	1	0	0
Diphtheria ... ..	12	0	2	1	0	0	0	0	1	1	1
Croup ... ..	1	0	2	0	0	0	0	0	3	1	0
Typhus Fever ... ..	0	0	0	0	0	0	0	0	0	0	0
Typhoid Fever ... ..	0	1	0	1	1	0	0	0	1	0	1
Continued Fever ... ..	0	0	0	0	0	0	0	0	0	0	1
Puerperal Fever ... ..	0	0	0	1	0	0	0	0	0	0	2
Erysipelas ... ..	0	0	0	0	0	0	0	0	0	0	1
Whooping Cough ... ..	3	0	4	5	0	3	1	1	0	0	0
Diarrhœa and Dysentery ... ..	16	5	3	9	6	8	16	10	2	14	4
Rheumatic Fever ... ..	0	0	0	0	0	0	0	1	1	0	0
Phthisis... ..	17	15	11	6	8	10	8	12	8	12	14
Bronchitis, Pleurisy, and Pneumonia ... ..	23	24	12	14	35	36	17	14	13	18	13
Heart Disease ... ..	8	13	11	5	4	8	10	8	10	8	12
Cancer ... ..	5	3	8	5	2	2	7	3	7	not recorded	
Injuries and Suicides	3	2	3	4	1	5	2	3	2	1	0
All other causes ... ..	66	48	41	61	39	59	54	56	56	58	42
	155	112	97	118	99	133	119	108	113	113	100

It is somewhat disconcerting to see from this table that no less than 33 of those deaths occurred from what are known as zymotic diseases, viz., scarlet fever 1, diphtheria 12, croup 1, whooping cough 3, and diarrhœa 16. These 33 deaths give us a zymotic death-rate of 3.08 per 1,000 per annum, as compared with 0.67 in 1903; 1.1 in 1902; 3.6 in 1901; 0.98 in 1900; 1.3 in 1899, 2.1 in 1898; 1.1 in 1897; 1.4 in 1896; 1.4 in 1895; and 2. in 1894.

The deaths may be tabulated as follows:—

	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894
Under 1 year ... ..	47	23	25	38	23	34	48	36	31	41	20
1 year and under 5	17	5	9	19	14	22	9	16	12	14	17
5 " " " "	15	12	6	6	5	3	3	1	5	6	7
15 " " " "	25	7	6	5	2	10	7	4	1	8	5
25 " " " "	65	35	41	28	32	19	36	31	31	27	30
65 and upwards ... ..	37	31	25	21	28	31	24	23	30	17	21
	155	112	97	118	99	133	119	108	113	113	100

Of the 37 deaths occurring in persons over 65 years of age, 7 were between 65 and 70; 19 between 70 and 80; 10 between 80 and 90; and one over 90 years of age.



INFANTILE MORTALITY.—I regret to say the number of deaths in infants under 1 year of age has again risen, no less than 47 having died during the first year of their existence. This number has only been exceeded once, viz., in the year 1898, when 48 died. These 47 deaths give us an infant mortality of 156.6 per 1000 births registered, that is to say, if 1,000 children had been born in Beeston during the year, 156 would have died during the first year of their existence.

Tabulated and compared with the nine previous years, the causes of deaths in infants under 1 year of age are as follows:—

	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895
Premature birth ... ..	11	5	5	4	2	4	8	8	5	10
Debility from birth ... ..	1	4	6	8	4	4	4	5	5	3
Bronchitis & Pneumonia	7	5	0	8	10	9	6	3	4	4
Convulsions ... ..	4	2	3	3	1	3	3	7	6	6
Constitutional Syphilis...	0	0	0	0	0	0	0	1	0	1
General Tuberculosis ...	2	0	0	0	0	2	2	0	1	2
Diarrhœa ... ..	16	5	2	5	4	6	14	10	1	11
Rickets ... ..	0	0	0	0	0	0	0	0	1	1
Tubercular Meningitis ...	3	2	3	2	2	1	2	2	1	1
Measles... ..	0	0	0	3	0	0	3	0	3	0
Tubes Mesenterica ... ..	0	0	0	0	0	0	0	0	1	0
Natural Causes										
(Coroner's enquiry)	1	0	2	2	0	2	2	0	0	0
Whooping Cough ... ..	1	0	3	3	0	3	1	0	0	0
Other causes... ..	1	0	1	0	0	0	3	0	3	2
	<hr/> 47	<hr/> 23	<hr/> 25	<hr/> 38	<hr/> 23	<hr/> 34	<hr/> 48	<hr/> 36	<hr/> 31	<hr/> 41

Even after deducting the 11 deaths from premature birth and the one from debility from birth, the number of infantile deaths is sadly too large. Diarrhœa, which, owing to the wet, cold summer of 1903 was almost entirely absent, returned with unabated vigour during last summer, when the atmospheric conditions were exactly reversed. It alone claimed 16 victims, and points conclusively to the necessity of flushing the sewers during hot and dry weather, and to the desirability of educating mothers in the preparation and preservation of the milk used for infant feeding.

NOTIFICATIONS.—The number of notifications of infectious diseases has again risen during the year under review. No less than 103 such cases have been sent in to me, and have given rise to much work and anxiety to your sanitary officials. In every case I have made a personal visit to the infected houses, investigated

the sanitary arrangements, enquired into the milk supply, and given directions for the best means of carrying out isolation and subsequent disinfection.

Tabulated they are as follows:—

	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894
Small-pox ... ..	2	0	0	0	0	0	0	0	0	0	0
Scarlet Fever ... ..	31	24	45	10	79	95	1	2	9	17	3
Diphtheria ... ..	60	4	7	4	1	2	5	6	6	4	10
Croup ... ..	0	0	2	0	0	0	0	1	4	2	1
Typhoid Fever ... ..	3	4	6	6	10	6	2	5	2	7	9
Erysipelas ... ..	7	4	1	0	1	10	4	6	3	4	2
Continued Fever ... ..	0	0	0	0	0	0	0	0	0	0	1
Puerperal Fever ... ..	0	0	0	1	0	0	0	0	0	0	4
	103	36	61	21	91	113	12	20	24	34	30

SMALL-POX.—In my 11 previous Reports I have been able to announce that no case of small-pox had been notified, but in February last my colleague, Dr. Smith, asked me to see a case with him which proved to be an undoubted case of this disease. It was difficult to trace the exact source of infection, but in all probability it was brought to this patient by one of his assistants, who had been working at his trade as decorator in Sneinton, where cases of small-pox were somewhat prevalent. Fortunately, owing to the foresight of your Council in joining with Carlton, Arnold, Hucknall and Stapleford in providing a small-pox hospital, we were able to immediately send him there. His wife and two children were re-vaccinated and confined rigidly to the house, and 11 contacts were also re-vaccinated, and isolated in their homes, your Council compensating them for loss of wages, etc. Unfortunately, the patient's wife also contracted the disease, and was removed to the hospital. The two children, who were still protected by their primary vaccination, escaped, but owing to the difficulty of finding a home for them during their parents' absence they were also sent to the hospital. The 11 contacts were seen by me daily for a fortnight, and then, showing no signs of the disease, were allowed to resume work. The original patient's house was thoroughly disinfected, the bedding and clothing burnt, and all the rooms repapered and whitewashed. Owing to the steps taken no further case occurred, which I think is a matter for congratulation. The one redeeming feature of the case is that in consequence of the

scare, the great majority of the inhabitants of Beeston were re-vaccinated, and are consequently safe from the dread disease for some years to come. The total cost to your Council of carrying out these measures was £23 9s. 8d.

SCARLET FEVER.—I regret to find that the number of cases of this disease notified to me during the year has again slightly increased, viz., 31. Ever since 1899 we have had more or less an epidemic of scarlet fever in our midst, and for reasons which I have referred to in my previous reports we are greatly handicapped in our endeavours to stamp it out. Briefly stated, it is the very mildness of the epidemic that increases the risk of spread. I am quite convinced from my observations as a general practitioner that a case here and there is entirely overlooked by its parents, and after a few days' mild illness is allowed to go back to school during its most infectious stage. The only suggestion I can make for obviating the difficulty is that the teachers in our Board Schools should be asked to keep a sharp look out for evidences of peeling, more particularly upon the hands of their scholars. One death took place indirectly from scarlet fever, the immediate cause being an abscess in the ear spreading to the brain.

DIPHTHERIA.—Perhaps the worst feature of my Report is the number of cases of this disease that have been notified during the year under review. No less than 60 cases have been reported to me, the majority of them occurring since the beginning of October. In November the cases became so numerous that I thought it desirable to make a special Report on the subject. As this contains all the salient features of the case I cannot do better than introduce it here in extenso.

The Chairman and Members of the Sanitary Committee of the  
Beeston Urban District Council.

Beeston, *November 13th*, 1904.

GENTLEMEN,

In view of the number of cases of diphtheria that have been notified to me during the year, I think it desirable that I should make a special Report on the subject.



At the outset I might point out that since my appointment as Medical Officer of Health I have in each of my Annual Reports referred to the comparative immunity that Beeston possessed with regard to this disease. I find that for the ten years ending with 1903 forty-nine cases have been notified, giving an average of under five per annum.

For this year (1904) up to the end of September, the number of cases notified was not alarming, but with the advent of October they came in with increasing frequency. Thus I find that one was notified in February, one in March, two in April, one in July, three in August, three in September, eleven in October, and ten in November up to date (Nov. 12th). On tabulating them after making enquiries, I was at once struck with the fact that the large majority of them were children in the Infant Department of the Church Street Board Schools—no less than twenty-two of them being pupils of that school, while only four went to the Nether Street Schools, the remaining six cases being in persons too old or too young to go to any school. In consequence of this I asked your Surveyor, Mr. Flood, to examine the sanitary arrangements of the Church Street Schools, and his report is as follows:—

#### REPORT OF THE DRAINS OF THE CHURCH STREET SCHOOLS.

DEAR SIR,

In accordance with your request, I beg to report respecting the above drains.

I have tested the drains mentioned with the smoke test, and found several defects, viz. :—

- (1) The ventilating shafts were ventilated at the foot, so that any sewer gas that should come up the drain would escape before going up the shaft. These were close to the infants' entrance.
- (2) The down rain-water pipes were connected direct to sewer, and opened out close to windows of Boys' Department. These windows are generally kept open, so that any sewer gas that came up these rain-pipes (which are nothing more

than vent shafts), would be blown by the wind into the rooms. Nearly all the rain-pipes were connected direct to sewer, but there is no danger to health so long as the joints are well made and the pipes open at eaves and away from windows. We have no bye-law to prevent rain-pipes being connected to sewer direct.

- (3) The teachers' w.c. flush was defective, and the chain had to be pulled many times before any water would come.
- (4) The ventilators in many cases were not carried 3ft. above eaves, and in some cases not so high as the eaves.
- (5) The trough closets have to be flushed by hand, the result being that filth often remains for a long time in the trough before being flushed. (At Nether Street I found flushing apparatus and troughs clean). The seats were also very wet from hand-flushing, and quite unfit for the children to sit on.

Miss Hooton complained that there was no closet for infants, they having to use the girls' closets, which were much too high for them. I acquainted Mr. Hooley, the County Surveyor, who acts as architect to the Notts. Education Committee, with the facts of the case, and the work has been commenced. Since the beginning we have found that none of the pipes are jointed with cement, but with clay.

W. H. FLOOD.

From this Report you will gather that some defects were discovered which, though not in themselves sufficiently grave to cause the outbreak, might render the children susceptible to the influence of the particular organism or bacillus which gives rise to diphtheria. I might here draw your attention to the fact that the popular opinion that diphtheria is the result of sewer gas inhalation is not absolutely true, but on the contrary, the more correct opinion is that it spreads from person to person by means of the secretion from the throats of those affected.

One of the main difficulties in checking the spread of the disease lies in the fact that without a microscopical examination of the secretion of the throat it is impossible to say when a patient who has been suffering from diphtheria ceases to be a danger to those around him. The particular organism or bacillus has been found in the throat three months, and even longer, after the disease has been apparently cured, and may in consequence be in a contagious condition.

On November 9th I thought it desirable to seek the opinion of the Medical Officer of Health for the County, Dr. Handford, as to whether the Church Street Schools ought to be closed, and I gathered from him that unless they were closed for at least three months (except for purposes of disinfecting) it would be of little use. This would entail a serious loss in the grant, and even if carried out might not prove effective. What I would suggest is that:—

- (1) The sanitary defects at the Church Street Schools be remedied with the least possible delay.
- (2) That the schools be closed for a week to enable them to be thoroughly disinfected and cleaned.
- (3) That all slates and pencils be destroyed, and paper only used.
- (4) That all the children from an infected house be kept from going to school for at least three months, unless their throats be declared free from contagion after microscopical examination.
- (5) That such throats—or rather the secretion from them—be examined periodically after 3 weeks from the apparent cure of the case by an expert, the expenses of this being defrayed by the Sanitary Authority.
- (6) That the Sanitary Authority supply anti-toxin gratis for the treatment of those who cannot afford the cost of the same. The measures adopted for stamping out the disease met with a fair amount of success, though I regret to say that the epidemic is not yet entirely stamped out.

Of the 60 cases notified, no less than 12 died, which is a rather heavy rate of mortality, viz., 20 per cent.

**TYPHOID FEVER.**—Three cases of this disease were notified to me during the year, of which none died. In one case the origin was probably due to mussels, which the patient had eaten heartily of a few days before. No insanitary defects could be discovered in the patients' surroundings.

**NON-NOTIFIABLE INFECTIOUS DISEASES.**—Nothing noteworthy is to be recorded in connection with these diseases. Measles has for the second year been almost entirely absent from Beeston, while whooping-cough has not been at all prevalent. Considering the few cases that have been brought under my notice as a general practitioner I am surprised to find that these diseases have claimed three victims.

Still, in view of the fact that both these diseases are certain to recur in the no distant future, I must again draw your attention to the desirability of your Sanitary Authority collaborating with the school teachers and those brought into intimate contact with the children in detecting and removing the early cases of these maladies.

**CONSUMPTION OR PHTHISIS** has been responsible for 17 deaths. In my two previous Reports I have referred to the nature of this dread disease, which yearly exacts its toll of victims, and to the conditions which favour its onset and spread, with the measures now adopted to combat the evil. As the subject is so important I must, at the risk of reiteration, again refer to it. It cannot be too widely known that consumptoin is an infectious disease, due to a microscopic organism which finds lodgment in the lungs and other organs. The mode by which infection is spread is principally through the sputum or spit, which teems with these organisms, and which when dried retain their vitality, and can be blown about as infected dust. It has been conclusively proved that in a healthy person, living in hygienic surroundings, these germs cannot find a suitable medium for growth and multiplication sufficient to produce the characteristic symptom of consumption, and conversely that

**FOOTNOTE.**—No case of Diphtheria has been notified to me since Feb. 2nd, up to the time of going to print, viz., March 6th, 1905, so that we may reasonably conclude the epidemic is now ended.



persons debilitated through being in unhealthy surroundings, with insufficient air and light, fall a ready prey to the disease. It follows, therefore, in combating this disease that:—

- (1) Consumptive patients should exercise the most scrupulous care in avoiding spitting in public places. Instead of this they should carry about with them properly constructed spit mugs, containing a small quantity of some antiseptic, such as carbolic acid, into which the sputum can be received, and which when full can be emptied into the fire. Some sanitary authorities have a bye-law against spitting in public places, making it punishable by a fine of 40s.
- (2) That all consumptives and those coming into contact with them should be placed in the most hygienic surroundings, with any amount of fresh, pure air and sunlight. In connection with the subject I am glad to say that the absolute dread of fresh air obtained by open windows day and night, which most people had a few years ago, is now passing away, though there is still much room for improvement in this respect. Whether in health or disease the windows of all rooms ought to be more or less open day and night to admit fresh air. The popular belief that night air is injurious is entirely erroneous.
- (3) That consumption should be placed on the notifiable list of infectious diseases, so that measures can be taken for disinfecting the rooms that a consumptive has occupied. I am glad to say that one of my colleagues has on more than one occasion this year asked me to see to the disinfection of such rooms, and I think I may take this opportunity of saying that your Council is always willing to sanction such steps being taken.

The question as to whether consumption in the human being can be caused by the milk or flesh of tuberculous cows is still being considered by a Royal Commission, but there is little or no doubt that their verdict will be in the affirmative. This being so, it



necessitates an increased vigilance upon the part of your sanitary officials in the inspection of cowsheds, dairies, and recently-killed meat for human consumption. In our inspection of cowsheds we seldom find that the proper amount of air space per cow, viz., 800 cubic feet, is allowed for, and for the future, when plans for the building of such places are submitted to your Council, this should be borne in mind.

SEWAGE FARM.—In consequence of the somewhat severe criticisms of Colonel Coke, the Local Government Board Inspector, on the management of the farm, which I commented upon in my Report for 1903, more plots have been reserved for the filtration of sewage matter than was formerly done. In consequence of this, while the value of the produce grown on the farm has slightly decreased, the hygienic conditions that have been obtained amply compensate for this. I would again, in connection with this subject, draw your attention to the fact, which I stated in my last Report, that a Sewage Farm is primarily for the purpose of treating sewage, and is not expected to be a profitable undertaking. The sale of the crops grown upon the farm, after deducting expenses, realised £148 4s. 8d. In addition to this, much fodder and hay was grown upon the farm and consumed by the horses belonging to the Council, amounting to £132 16s. While on the subject of sewage disposal, I might say that we are having an increasing difficulty with regard to the disposal of the sewage at the Rylands and Silver Hill estate. These form two isolated portions of Beeston, with separate arrangements of their own, tanks being used to collect the sewage material. Owing to the growth of these districts, the emptying of these tanks is becoming increasingly frequent, and entails a considerable expense to your Council. At your express wish the Surveyor, Mr. Flood, drew up a Report on the subject of the Rylands, which, from its importance, I give in extenso:—

*19th September, 1904.*

GENTLEMEN,

In accordance with your instructions at the last Council meeting, I beg to report on the system of sewage at the Rylands, Beeston.

At present, the whole of the sewage and surface water from yards and roofs of the houses in this district flows into a tank at the canal side. This system answered very well until some little time back the Council ordered the owners of Prince of Wales Terrace to close the three wells on account of sewage matter and rain water getting into them and making the water quite unfit for drinking purposes. The owners closed the wells and a water main was laid on to the Rylands and the 21 houses were fitted with taps and sinks to each house, thus more than doubling the amount of water and sewage flowing to the tank. In addition to this, on the rebuilding of the Boat Inn the wells were closed, and water laid on, also two w.c.'s added.

Previously, the tank required emptying every 2 months, at a cost of £2 11s. 4d. per time. Now the tank requires to be emptied every 2 or 3 weeks (according to amount of rain fallen), at the same cost per emptying as before. Assuming that the tank, which is 10 by 10 by 7, is only emptied once every 3 weeks, this means a sum of £35 18s. 8d. spent annually.

Not only is it an expensive system, but it is a troublesome one. At certain times of the year it is extremely difficult to get any landowners to allow us to put the sewage on the land, and so great was the difficulty this year that I had fears we should have to cart it to the manhole at Lavender Grove, and send to farm to be pumped again, and so add to cost of disposal. The time has now come when a less costly and more efficient system must be adopted. Several ideas have occurred to me.

- (1) To enlarge the tank, but then this would not do away with the cost of emptying.
- (2) Lay a separate sewer for surface water. This might lead to a similar state of things as at Silver Hill, causing trouble in the future, and still entail cost of emptying, although reduced.
- (3) For the Council to lay the sewer in a proper manner, and build small filter beds. This last, I think, is by far the best system, although the most costly at first. To carry this system out it would be necessary to rent, or better,

to purchase, a small plot of land, say half-an-acre, somewhat near present tank, so as to make use of the existing tank. The sewage could still fall into the tank and be pumped out and put on to beds. I should also suggest that the small gas-engine at the Farm (which is of very little use to us) should be put up there for pumping purposes; the engine could be worked for a few hours a day in each week, which would be all that was necessary. Another suggestion which comes to my mind is that a windmill, such as that used at Moore's Farm on Derby Road, could be used for the purpose of raising the sewage. There is still another suggestion which has occurred to me, that of raising the sewage by syphon. I would also suggest that the Trent Navigation Co. be approached, and for a small acknowledgment they would allow us to run the effluent into the canal. I do not think there could be any objection to this provided the effluent was good, which I am sure would be the case if treated in the manner suggested by me. I have been asked why the sewage cannot be conducted to the Farm. The simple reason is that the Rylands is lower than the Farm, and in consequence a fall cannot be obtained. I have not gone into the matter of cost closely, as it would be useless wasting my time in preparing plans and estimates before knowing which system the Council proposes to carry out. When I know what decision they come to I will then prepare the necessary plans and estimates. I might give you a rough cost of the following:—

Enlarging tank, £20, and £27 per year for emptying same.

Laying new surface pipes, £70, and £15 per year for emptying.

Filter Beds: I should think £250 to £350. This to include purchase of land.

If a loan could be obtained, I am convinced that my third suggestion would not only prove to be the cheapest, but most effective.

(Signed) W. H. FLOOD.



The Committee requested a sub-committee to consider the Report, and to inspect and report at the next meeting.

With regard to the Silver Hill Estate, it is just possible to drain into our existing system by carrying a pipe across some grass fields to an existing sewer in Albert Road, a distance of 474 yards. As there is only a fall of two feet in this length, it is only just practicable. A sub-committee has been formed to consider these two projects, and so far as I know they have not yet come to a conclusion on the matter.

The tub system, which I have explained in my previous Reports, is almost universally in use in Beeston, still throws a great strain upon your sanitary staff. No less than 2,190 tubs are removed weekly (133,880 yearly) to the farm, where they are emptied, washed, and dusted with disinfecting powder. This work is done between the hours of 10 p.m. and 2 a.m., and though we have an odd complaint of a leaky tub or imperfect cleansing now and then, it is on the whole efficiently done. This night-soil work costs your Council £873 17s. 0d. roughly per annum. While on the subject I find that only 5 of the 67 middens have been converted into tub closets during the year, leaving 62 still existing in the parish. This is very slow progress in a sanitary reform that is urgently needed.

In connection with this subject I cannot do better than quote what the late Sir Richard Thorne Thorne said when chief Medical Officer to the Local Government Board:—

“The fact that with our present knowledge such a structure as the common midden-privy should not only exist in our midst, but be clung to with a perverted tenacity, is, in my opinion, the greatest blot which attaches to English sanitary administration at the close of the 19th century. Apart from its sanitary aspect it is a system as degrading and ignoble as it is foul, and I trust the day is not far distant when we shall look back to it as a barbarism of the past.”

THE PASTURE DYKE has again been a source of great trouble to us during the year. I have on several previous occasions referred to this dyke, which runs through the lower part of the parish, at

what is practically a dead level, and which at certain portions of its course is the receptacle for all sorts of rubbish thrown into it by children and residents living in its neighbourhood. Owing to its filthy condition the members of the Sanitary Committee, with its officials, in July went along its entire length, and decided to clean it out from end to end. This was done, with temporary improvement, though in my opinion something more drastic is still necessary to improve its condition.

What I would suggest is that in certain places, notably in the neighbourhood of Humber Road, where, owing to the repeated cleansing processes, it is practically bottomless, the chaunel should be narrowed by making artificial banks, and in addition, that large blocks of Stanton slag should be thrown into it to raise the bottom, and to try and create a stream. I may add that all sources of pollution of the dyke having been removed, I cannot see why, with care, and proper supervision, this perennial cause of trouble to us should not be markedly improved.

VENTILATING SHAFTS.—Two of these have been erected during the year, and three more are under consideration. I would venture to urge upon your Council to do their utmost to close up the existing manholes at street level, and to ventilate the sewers by means of these shafts. I would also suggest that no rain-water pipes should be allowed to empty themselves direct into the sewers. I frequently see such pipes with imperfectly caulked joints, through which sewer gas can escape, and in some instances the upper or free end of the pipe is too adjacent to bedroom windows to be altogether safe.

During the year plans were passed for 116 new houses, of which 81 were completed and certified by your Inspector as being fit for habitation. One new street has also been made off the Queen's Road.

Your Council have had to deal with one case of pollution of the air by smoke due to improper stoking, and assurances were given by the firm in question to mitigate the nuisance.



In consequence of numerous complaints made by the residents of Beeston as to the offensive smells arising from works situated in the lower part of the town, an interview was arranged to take place between a sub-committee of your Council, with its officials, and the principals of the firm in question.

This took place on September 29th, 1904, and your deputation was assured that a large sum of money had been spent in overcoming the difficulty, and that as the work was carried on now, there could, except on very odd occasions, be no cause for complaint.

The following Report was read by the Chairman (Mr. Pratt) of the sub-committee at a meeting of the Health Committee held on October 3rd, 1904 :—

“ We feel satisfied that the firm has made a sincere and genuine effort to mitigate the nuisance by erecting a large coke stove, through and over which the noxious fumes pass, and provided that the stoves are kept continually at a proper temperature, a complete combustion of the offensive gases takes place, thereby reducing to a minimum the unpleasant smell. This has been verified by the analysis of the gases thrown off before and after passing through the coke furnace by Mr. Trotman, the City Analyst. The firm's contention is that the intermittent complaints received may have had some foundation of fact, but it would probably be caused through the carelessness or negligence of their workmen in not keeping the coke furnace at a sufficient degree of combustibility, or, in other words, letting the fires go down. This they are most anxious to obviate, and promise that if the Council will give them dates with any future complaint they will take up the matter strongly with the men in charge of the stove, and do their utmost to prevent its occurrence.”

The Committee, in consequence of this Report, recommend that in future no complaints be received unless they be in writing, and furnish full details as to date, time, etc., and that upon receipt of same they will be forwarded immediately to the Company.

FACTORY AND WORKSHOPS.—The Act of 1901 has entailed much extra work on your Sanitary Officials. Fourteen factories exist in Beeston, and it is the duty of your officials to see that the sanitary accommodation for the workers, and adequate means of escape from fire exist. These have been inspected during the year and found to be in order. A lamentable accident occurred in one of them owing to the bursting of a small boiler used for heating purposes only. Owing to a hard frost the water in the circulating pipes became frozen, steam was generated, and from the absence of a safety valve, the boiler burst. One death resulted. In addition to these 14 factories there are 17 workshops, *i.e.*, buildings in which no mechanical power is used, but in which several people are regularly employed. These also have been inspected, and call for little comment. Slight defects, such as want of whitewashing and ventilation are occasionally met with, but are promptly remedied on attention being called to them.

There are also 79 Homeworkers' premises to be investigated, these being used chiefly in the mending and scalloping of lace. Our principal concern in this last class of cases is to see that no work is allowed to be done in a house in which any infectious disease exists. The twelve bakerhouses and eight slaughter-houses are inspected twice yearly. I am glad to say none of the former are underground, and only one required attention, an untrapped drain being found to exist just inside the door.

The slaughter-houses are conducted on cleanly and sanitary principles. Very few dairies or store places for milk exist, the milk being immediately sent away for distribution. These dairies and cowsheds should now be registered and regularly inspected by your officials.

In conclusion, Gentlemen, I would again wish to return my sincere thanks to the Members of the Council, and the Officials for their unfailing courtesy to me on all occasions.

I am, Gentlemen,

Yours faithfully,

FRANK ROTHERA.

TABLE I.

# Vital Statistics of Whole District during 1904 and Previous Years.

Name of District, BEESTON (Notts.)

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.			
				Under 1 Year of age.		At all Ages.	
		Number	Rate.	Number	Rate per 1000 Births registered.	Number	Rate.
1	2	3	4	5	6	7	8
1894	8,000	244	30.5	20	81.9	100	12.5
1895	8,250	245	29.6	41	167.	113	13.6
1896	9,000	259	28.7	31	119.	113	12.
1897	9,750	293	30.	36	122.8	108	11.
1898	10,065	280	28.8	18	171.4	119	11.8
1899	10,000	256	25.6	34	132.8	133	13.3
1900	10,185	243	23.8	23	94.6	99	9.7
1901	8,950	278	31.	38	136.	118	13.1
1902	9,729	267	27.4	25	93.6	97	10.
1903	10,377	278	26.7	23	82.7	112	10.7
Averages for years 1894—1903	9,430	264	28.2	31	120.	111	11.7
1904	10,692	300	28.	47	156.6	155	14.4

Area of District in acres (exclusive of area covered by water), 1,586.

Total Population of all ages, 8,950.

Number of inhabited houses, 1,978.

Average number of persons per house, 4.5.

} At Census of 1901.

TABLE II.

# Vital Statistics of separate Localities in 1904 and previous years.

Name of District, BEESTON (Notts.)

NAMES OF LOCALITIES.	1.—BEESTON.			
YEAR.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.
	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1894 ...	8,000	244	100	20
1895 ...	8,250	245	113	41
1896 ...	9,000	259	113	31
1897 ...	9,750	293	108	36
1898 ...	10,065	280	119	48
1899 ...	10,000	256	133	34
1900 ...	10,185	243	99	23
1901 ...	8,950	278	118	38
1902 ...	9,729	267	97	25
1903 ...	10,377	278	112	23
Averages of Years 1894 to 1903. }	9,430	264	111	31
1904 ...	10,692	300	155	47



TABLE III.

# Cases of Infectious Disease Notified during the Year 1904.

Name of District, BEESTON (Notts.)

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						
	At all Ages.	At Ages—Years.					
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards.
Small-pox ... ..	2					2	
Cholera ... ..	0						
Diphtheria ... ..	60		17	36	3	4	
Membranous croup ...	0						
Erysipelas ... ..	7	1		2		4	
Scarlet fever ... ..	31		4	21	5	1	
Typhus fever .. ..	0						
Enteric fever ... ..	3			2		1	
Relapsing fever .. ..	0						
Continued fever ... ..	0						
Puerperal fever . . .	0						
Plague ... ..	0						
Totals ... ..	103	1	21	61	8	12	0

Two Small-pox cases to Small-pox Hospital at Hucknall.

Two Enteric Fever cases to Nottingham General Hospital.

Isolation Hospital—Small-pox Hospital at Hucknall Torkard.



TABLE IV.

## Causes of, and Ages at, Death during Year 1904.

Name of District BEESTON (Notts.)

CAUSES OF DEATH.	Deaths in or belonging to whole District at subjoined ages.						
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards
1	2	3	4	5	6	7	8
Small-pox .. ..	0						
Measles .. ..	0						
Scarlet Fever .. ..	1			1			
Whooping-Cough .. ..	3	1	2				
Diphtheria and Mem- branous Croup .. ..	12		6	6			
Croup .. ..	1		1				
Fever { Typhus .. ..	0						
Enteric .. ..	0						
Other continued .. ..	0						
Epidemic Influenza .. ..	0						
Cholera .. ..	0						
Plague .. ..	0						
Diarrhœa .. ..	16	16					
Enteritis .. ..	0						
Puerperal Fever .. ..	0						
Erysipelas .. ..	0						
Other Septic Diseases .. ..	0						
Phthisis (Pulmonary Tuberculosis) .. ..	17	1		1	5	9	1
Other Tubercular Diseases .. ..	4	2	2				
Cancer, malignant disease .. ..	5					4	1
Bronchitis .. ..	13	6	1			1	5
Pneumonia .. ..	10	1	2		1	4	2
Pleurisy .. ..	0						
Other Diseases of Res- piratory Organs .. ..	0						
Alcoholism .. ..	3					3	
Cirrhosis of Liver .. ..	0						
Venereal Diseases .. ..	0						
Premature Birth .. ..	11	11					
Diseases and Accidents of Parturition .. ..	0						
Heart Diseases .. ..	8			1	1		6
Accidents .. ..	1						1
Suicides .. ..	2					2	
All other Causes .. ..	48	9	3	3	0	12	21
All Causes .. ..	155	47	17	12	7	35	37

# Annual Report of Medical Officer of Health for 1904, for the Urban District of Beeston.

## FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORK.

### 1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of Inspections.
Factories (including Factory Laundries) .. ..	14
Workshops (including Workshop Laundries) .. ..	26
Homeworkers' Premises .. ..	79
Total .. ..	119

### 2.—DEFECTS FOUND.

Particulars.	Number of Defects.	
	Found.	Remedied.
<i>Nuisances under the Public Health Acts :—</i>		
Want of cleanliness .. ..	5	5
Want of drainage of floors .. ..	1	1
Total .. ..	6	6

### 3.—OTHER MATTERS.

Class.	Number of	
	Lists.	Out- workers.
Homework :—		
Lists received .. ..	2	40
Addresses of outworkers {	3	8
	6	20
Workshops on the Register (S. 131) at the end of 1904 :—		
Bakehouses .. ..		12
Slaughterhouses .. ..		8
Tailors' Workshops .. ..		1
Dressmakers .. ..		3
Stables .. ..		2
Total number of workshops on Register ..		26

